

## REMARKS.

The rejection of claims 1 and 2 under 35 U.S.C. §103(a) as being unpatentable over JP 62-128911 ('911) is respectfully traversed. As pointed out by the Examiner, the '911 reference discloses cobalt oxyhydroxide particles having a size of 0.1-1 microns. However, the Examiner incorrectly ascribes the particle sizes in the examples of the present application to the Applicant's claimed heterogenite powder. The particle sizes provided in the Applicants' examples refer to the FSSS size of the cobalt metal powders made from the claimed heterogenite powder. Therefore, there is no significant overlap between the particle size ranges to support the obviousness rejection. Furthermore, the surface area of the '911 particles may be estimated from the particle size. Assuming spherical particles, the relationship between the particle size and surface area can be written as: S=6/pM, where S is the average surface area and M is the average particle size. See attached, Irani et al., Particle Size: Measurement, Interpretation, and Application, p. 128 (John Wiley & Sons, Inc. 1963). Using a density for heterogenite of 4.3 g/cm<sup>3</sup>. (See attached, Mineral Data Sheet), the surface area for the cobalt oxyhydroxide material in the '911 reference may be estimated to range from 14 to 1.4 m<sup>2</sup>/g. This range is at least several times lower than the surface area of the Applicants' claimed invention. Thus, the Applicants respectfully assert that the claimed invention is not obvious in view of the '911 reference.

In view of the foregoing response, it is believed that the Examiner's rejections have been overcome and that the application is in condition for allowance. Such action is earnestly solicited.

Respectfully submitted,

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